

## Patent Abstracts of Japan

PUBLICATION NUMBER : 2001342100  
PUBLICATION DATE : 11-12-01

APPLICATION DATE : 29-09-00  
APPLICATION NUMBER : 2000301301

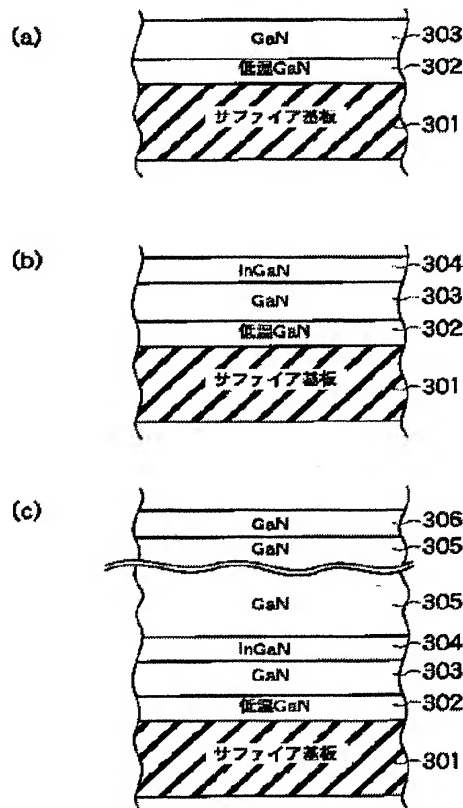
APPLICANT : TOSHIBA CORP;

INVENTOR : ISHIKAWA MASAYUKI;

INT.CL. : C30B 29/38 C30B 25/18 H01L 33/00

TITLE : MANUFACTURING METHOD OF  
SUBSTRATE FOR EPITAXIAL  
GROWTH AND MANUFACTURING  
METHOD OF SEMICONDUCTOR  
DEVICE USING SUBSTRATE FOR THIS  
EPITAXIAL GROWTH

工程断面図(その1)



ABSTRACT : PROBLEM TO BE SOLVED: To efficiently and easily obtain a substrate for epitaxial growth of a GaN compound semiconductor monocrystal membrane which has little crystal defect and favorable surface morphology.

SOLUTION: This method comprises at least the steps of (a) epitaxially growing a first GaN compound semiconductor monocrystal membrane 303 on a bulk crystal substrate 301; (b) epitaxially growing a GaN compound semiconductor monocrystal membrane 304 containing In; (c) epitaxially growing a second GaN compound semiconductor monocrystal membrane 305; and separating a second GaN compound semiconductor monocrystal membrane 305 from the bulk crystal substrate 301 and making it the substrate for the epitaxial growth.

COPYRIGHT: (C)2001,JPO